**Oxide Dispersion Strengthened (ODS) Alloys**



Why?

Class of materials with exceptional characteristics, but challenges to practical application

Opportunity for step change in performance of existing and new plant components

Challenges:

Need for better joining techniques

Processing for improving strength of tubes

Improved oxidation resistance

Outputs & Benefits

•Identified viable joining techniques

•Commercial processing routes for strength improvement

•Identified coating for improved high-temperature service life

Proposed Work Plan (Phase 2)

•Qualify *new commercial ODS alloy*

•Alternative processing routes for strength improvement

•Explore novel process for making components from ODS alloys